

## CLAIMS

1. A fusion protein comprising a polypeptide having the antigenicity of Mycoplasma gallisepticum and a polypeptide derived from Herpesvirus outer membrane protein, said polypeptide derived from the outer membrane protein being ligated with the polypeptide having the antigenicity of Mycoplasma gallisepticum at the N terminus thereof.
- a 2. A fusion protein according to claim 1, wherein said outer membrane protein is derived from a herpes virus showing infection to fowl.
3. A fusion protein according to claim 2, wherein said outer membrane protein is derived from a Marek's disease virus.
- 15 4. A fusion protein according to claim 3, wherein said outer membrane protein is gB protein derived from a Marek's disease virus.
- a 5. A fusion protein according to claim 1, wherein said polypeptide derived from the outer membrane protein is a signal sequence portion in the outer membrane protein derived from a herpes virus.
- 20 6. A fusion protein according to claim 5, wherein said outer membrane protein is a signal sequence portion in the outer membrane protein derived from a herpes virus showing infection to fowl.
- 25 7. A fusion protein according to claim 5, wherein said signal sequence portion is a signal sequence portion in derived from the outer membrane protein of a Marek's

disease virus.

8. A fusion protein according to claim 5, wherein said polypeptide derived from the outer membrane protein is a signal sequence portion of gB protein derived from a Marek's disease virus.

9. A hybrid DNA coding for the fusion protein according to any one of claims <sup>2</sup> through 8. <sup>and 18</sup>

10. A recombinant vector in which a DNA coding for the fusion protein according to any one of claims <sup>2</sup> through 8 <sup>and 18</sup> has been inserted.

11. A recombinant Avipox virus in which a DNA coding for the fusion protein according to any one of claims <sup>2</sup> through 8 <sup>and 14</sup> has been inserted.

12. A recombinant live vaccine for anti-fowl Mycoplasma gallisepticum infection comprising as an effective ingredient a recombinant Avipox virus in which a DNA coding for the fusion protein according to any one of claims 1 through 8 has been inserted.

13. A trivalent live vaccine for anti-fowl Mycoplasma gallisepticum infection and anti-Marek's disease infection comprising as an effective ingredient a DNA coding for the fusion protein according to any one of claims 3 and 4.

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a'

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G3

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